

Notice of Allowability	Application No.	Applicant(s)	
	10/020,423	ZIPPER, ELIAV	
	Examiner	Art Unit	
	Melur Ramakrishnaiah	2643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 12-12-2001.
2. ☒ The allowed claim(s) is/are 1-24.
3. ☒ The drawings filed on 12 December 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| <ol style="list-style-type: none"> 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>12-12-2001</u> 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. 7. <input type="checkbox"/> Examiner's Amendment/Comment 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input type="checkbox"/> Other _____. |
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Allowable Subject Matter

1. The following is an examiner's statement of reasons for allowance: The present invention pertains to transmitters, and in particular, pertains to modulating and amplifying an information signal for further transmission through a radio channel.

The prior art of record in combination or alone fails to teach or suggest these elements of independent claims 1, 13, 16, and 22 in combination with other elements. For example independent claim 1 has claim limitations such as a phase difference element to generate a phase reference signal from phase information extracted from an offset input signal and an offset output signal, an amplitude difference element to generate an amplitude reference signal from amplitude information extracted from the offset input signal and the offset output signal, a signal synthesizer to synthesize an output signal from an amplitude reference signal and the phase reference signal, input combining element to combine an input signal with an original offset signal to produce the offset input signal, and an output combining element to combine the output signal and the original offset output signal. Independent claim 13 has claim limitations in addition what is recited in the independent claim 1 the following: a non-linear power amplifier to amplify the output signal generated by the signal synthesizer prior to being combined by the output combining element, and an origin offset signal source generator to generate the compensation signal. Independent claim 16 is a method claim for implementing claim 1. independent claim 22 has claim limitations such as a phase difference block to generate a phase reference signal from phase information extracted from an offset input signal and an offset output signal, an amplitude difference block to generate an amplitude

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reference signal from an amplitude information extracted from the offset input signal and the offset output signal, a signal synthesizer block to synthesize an output signal from the amplitude reference signal and phase reference signal, and an input combining block to add an input signal with an origin offset signal to produce the offset input signal.

For the above reasons independent claims 1, 13, 16, 22 and dependent claims 2-12, 14-15, 17-21, 23-24 are allowable.

2. Claims 1-24 are allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

--(6,853,836 B2) to Asam et al. discloses polar loop transmission circuit wherein a signal to be transmitted and feedback signal are separated into their polar phase and amplitude components and components are compared to one another for realizing a phase and amplitude modulation.

--(5,105,168) to DaSilva discloses a vector locked loop having a topology somewhat similar to two cross coupled phase locked loops, but wherein both magnitude and phase are used as feedback signals.

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--(GB 2135546) to Watkinson discloses a polar loop transmitter having a particular, but not exclusive, application in VHF single-sideband radio systems.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melur Ramakrishnaiah whose telephone number is (703) 305-1461. The examiner can normally be reached on M-F 6:30-4:00; every other F Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz can be reached on (703)305-4708. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Melur Ramakrishnaiah
Primary Examiner
Art Unit 2643